

## Exophthalmic Goitre.

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The following illustrates an instructive method of examination given at a clinic at the Indianapolis City Hospital February 5, 1909.

The patient before you, J. W., is a mulatto, 38 years old, whose parents were octogenarians when they died, and here the history stopped. The patient had the ordinary diseases of childhood, eight attacks of gonorrhea and *lues* fifteen years ago; otherwise he states that his health has been good until a year ago, when he had an attack of difficult breathing, weakness of the knees, and diarrhea; he could not sleep at night, his eyes were red and inflamed and gave him some pain, and sweating was profuse. He said he was in a hospital for a time and apparently recovered with the exception of a rapid heart.

This information is very vague. You notice he is a well-developed man, quite muscular and weighs 180 pounds. I placed a bandage over his eyes, and hence we shall commence at the feet in examination and come to this as a finale.

The feet and ankles are edematous, between the knee and ankle there are some yellow scars that are probably luetic. As I lay my hand upon his outstretched hand there seems to be a tremor; the nails are corrugated and there is evidence of pulsation of the blood vessels. Expansion of the chest is one-half inch. Picking up a fold of skin I notice some slight edema. During palpation we notice a tremor, thrill, tachycardia, and systolic murmur. You can see the evidence of dyspnea. There is a mitral regurgitation. The vascular condition of the carotids and other vessels is well defined. As we now place the patient in an upright position you will note a slight enlargement of the thyroid gland which could not be seen before. And as I remove

the bandage from the eyes you see the bulging of the eyeballs, which completes the drama. You will observe two signs which occur in some cases of this character: one, the lagging behind of the upper eyelid, known as the Graef's sign, and the increase in the width in the palpebral fissure, known as Stellwag's sign. You have thus far obtained sufficient information to determine this to be a case of exophthalmic goiter.

Possibly the cause may be a disturbed innervation, a diseased medulla or a lesion of the central nervous system; and it is surely evident that there is a toxemia. It is admitted by all that there is a perversion of the function of the thyroid gland, and I have given you in detail the presumable effects of hyper-secretion of the thyroid and the possible ways by which it may produce a defect of metabolism. Furthermore, the same may be said of the role played by the pituitary body as suggested by Sajous.

This disease may be preceded by emotional disturbances, mental strain or any of the infectious diseases, particularly rheumatism, or a hyperacidity of the thyroid body. The changes in the gland are a hyperplasia with tubular proliferation, the follicles being filled with colloid material.

The etiology and pathology of the subject are interesting and comprehensive and may be taken up at another time.

The treatment that we shall inaugurate will be rest in bed, an ice bag to relieve the tachycardia and bromide of sodium to overcome the insomnia. It may be necessary to use trional or perhaps morphia; the latter we should do without, if possible. A capsule containing 2 grs. of ergotone and 1-30 gr. of strychnia will be given three times a day, and 5 gr. doses of bromide of quinine four times a day. Iron and arsenic are uncalled for unless there is sufficient anemia

to demand their use. I doubt whether galvanization will render us much aid. We shall use digitalis because it has given us good service in the past, although there are some who will question its utility.

The serum treatment advocated by Beebe and Rogers has some followers, but its benefits seem to have been in the acute cases principally. I have known a number of cases which have been benefited by the use of the X-ray; and sometimes it is necessary to resort to surgical interference.

The bandage placed over the eyes is rather an unusual procedure. I did it to demonstrate the different conditions in the same person. Some cases present no evidence of eye symptoms nor enlargement of the thyroid. In others, we observe the condition of one eye and the opposite portion

of the thyroid body enlarged. One or more of the cardinal symptoms may be absent. Thus there was an opportunity for a problematical opinion and the non-observance of the eyes prevented the so-called snap diagnosis.

(In a private note to the Editor, Dr. Earp adds):

Some points seem to me original in the examination for class demonstration. The eyes bandaged prevented a snap diagnosis on the part of the students, and commencement at the feet left the head as a climax. I could also show a case with one eye affected or the absence of an enlarged thyroid or both, or the absence of all except the heart symptom. It worked like a charm with all the varieties shown.